

Chapter 1

PURPOSE OF AND NEED FOR ACTION

1.0 INTRODUCTION

Fidelity Exploration & Production Company (Fidelity) proposes development of coal bed natural gas (CBNG) in its Tongue River-Coal Creek Project area (Coal Creek POD). The project area is located within the CX Field (approved by the Montana Board of Oil & Gas Conservation), Big Horn County of southeastern Montana, T. 9 S., R. 40 and 41 E., (Map 1.3-1 and Map 1.3-2). Fidelity's proposal includes the development, operation, and reclamation of CBNG wells and various facilities on leased lands (surface and /or oil and gas mineral estate) in the Coal Creek POD. The proposed project is located on private, state and BLM administered surface. A more detailed description of the Plan of Development and Proposed Action is found in Chapter 2.

This Environmental Assessment (EA) was prepared by the Bureau of Land Management (BLM), in cooperation with the Montana Department of Environmental Quality (MDEQ) and the Montana Board of Oil and Gas Conservation (MBOGC). The EA analysis tiers to and incorporates by reference the information and analyses contained in the *Montana Statewide Oil and Gas Final Environmental Impact Statement and Amendment of the Powder River and Billings RMPs* (MT FEIS) approved by MBOGC on March 26, 2003, by BLM on April 30, 2003, and MDEQ on August 7, 2003. The EA addresses site-specific impacts and mitigation measures that are not covered in the MT FEIS. The EA completes the environmental review requirements of NEPA for BLM and of MEPA for MBOGC.

1.1 PURPOSE OF AND NEED FOR ACTION

The purpose of the Proposed Action is to develop the CBNG resources that may be found in coal seams on federal and private leases within the project area. The need for Fidelity's Plan of Development is to ensure that CBNG development of its leases occurs in an orderly, efficient and environmentally responsible manner that provides measures to protect the environment and surface owner assets.

1.2 CONFORMANCE WITH THE APPLICABLE LAND USE PLAN

BLM considers this proposed action under the requirements of the Mineral Leasing Act (MLA), the Federal Land Policy Management Act (FLPMA) and the BLM regulations at 43 CFR 3160 and other applicable laws and regulations.

As required by 43 CFR 1610.5, the Proposed Action

is in conformance with the terms and the conditions of the BLM 1984 *Powder River Resource Management Plan* (RMP), as amended by the Miles City District Oil and Gas FEIS/Amendment (BLM, 1994) and the *Montana Statewide Oil and Gas FEIS/Amendment of the Powder River and Billings RMPs* (BLM, 2003).

This site-specific EA tiers to and incorporates by reference the information and analyses contained in the *Montana Statewide Oil and Gas Final Environmental Impact Statement and Amendment of the Powder River and Billings RMPs* (MT FEIS) approved April 30, 2003, pursuant to 40 CFR 1508.28 and 1502.21. This project EA addresses site-specific resources and/or effects that are not covered in the MT FEIS.

1.2.1 Other Relevant Documents

- Final Environmental Impact Statement and Proposed Plan Amendment for the Powder River Basin Oil and Gas Project (WY FEIS), April, 2003.
- EA's prepared by DNRC for beneficial use of produced water at the Spring Creek and Decker Coal Mines, December, 2002 and June, 2003 respectively.
- EA prepared by BLM for the Fidelity Badger Hills Plan of Development, approved February 9, 2004 (MT-020-2004-134).
- EA prepared by BLM, MDEQ and MBOGC for the Powder River Gas – Coal Creek Plan of Development, approved November 19, 2004 (MT-020-2004-58).
- EA prepared by BLM for the Fidelity Dry Creek Plan of Development, approved December 16, 2004 (MT-020-2004-298).
- EA prepared by MDEQ for the MPDES permit for discharge of produced water into the Tongue River, approved June, 2000.
- EA's prepared by MDEQ for the Montana Air Quality Permit's (MAQP); #3302-00 issued final on March 31, 2004; MAQP #3303-00 issued final on April 6, 2004; MAQP #3334-00 issued final on September 29, 2004; MAQP #3335-00 issued final on September 30, 2004; MAQP #3337-00 issued final on September 30, 2004; and MAQP #3250-00 issued final on July 16, 2003.

1.3 DECISIONS REQUIRED

1.3.1 Montana Department of Environmental Quality (MDEQ)

Potential decisions to be made by the Air Resources Management Bureau of the MDEQ include making determinations as to whether a Montana Air Quality Permit would be required for the proposed activities. However, the Administrative Rules of Montana (ARM), Title 17, Chapter 8, Subchapter 7 – Permit, Construction and Operation of Air Contaminant Sources, specifically exempts certain activities from the requirement to obtain a Montana Air Quality Permit (MAQP). ARM 17.8.744(1)(b) exempts mobile emitting units, including motor vehicles, aircraft, and other such self-propelled vehicles from obtaining a MAQP. In addition, ARM 17.8.744(1)(i) exempts drilling rig stationary engines and turbines that do not have the potential to emit more than 100 tons per year of any regulated pollutant and that do not operate in any single location for more than 12 months from obtaining a MAQP.

Any future development, such as the placement of compressor engines or turbines, would also require a permit determination from MDEQ. ARM 17.8.743 requires that a person may not construct, install, modify, or operate a new facility or emitting unit upon which construction was commenced, or that was installed after November 23, 1968, that is not specifically excluded under ARM 17.8.744, and that has the potential to emit more than 25 tons per year of any regulated airborne pollutant, other than lead, without first obtaining a MAQP.

The MDEQ administers various environmental statutes in the state of Montana, including the Water Quality Act (75-5-101 *et seq.*, Montana Codes Annotated), Clean Air Act (75-2-101 *et seq.*, MCA), Hazardous Waste Act (75-10-401 *et seq.*, MCA), and Solid Waste Act (75-10-201 *et seq.*, MCA) and implementing regulation. In addition to these statutes, Department actions must also comply with the Montana Environmental Policy Act (MEPA) and the applicable implementing regulations.

The Department issues wastewater discharge permits under the MPDES permit program pursuant to the 75-5-402, MCA of the Montana Water Quality Act (WQA) and Sections 402 and 303 of the federal Clean Water Act (CWA). Under the federal CWA, the Department is delegated to issue storm water permits, permit federal facilities and issue general permits, as well as individual permits to both public and private facilities. Pursuant to ARM 17.30.1372, the Department has issued a Public Notice (MT) stating that a draft permit (MT) and fact sheet have

been prepared and that a tentative decision has been made to issue a wastewater discharge permit to Fidelity Exploration & Production Co.

The Department is also responsible for issuing federal CWA Section 401 certification for activities that are licensed or permitted by a federal agency and may result in a discharge to state waters. The Department has adopted administrative rules for the issuance of CWA Section 401 certifications at Title 17, Chapter 30, Subchapter 1 ARM. Pursuant to ARM 17.30.105(2)(b), it is the Department's intent to waive certification for this project because any discharge to state waters from this project will require an MPDES permit (MT-0030660 or MT-G100000).

1.3.2 Montana Board of Oil and Gas Conservation (MBOGC)

Decisions to be made by the Montana Board of Oil and Gas Conservation are whether to approve the Applications for Permit to Drill the fee wells and State wells or modify the proposals with mitigation measures. MBOGC approved the POD boundary and well spacing during a hearing conducted on February 12, 2004.

1.3.3 Bureau of Land Management

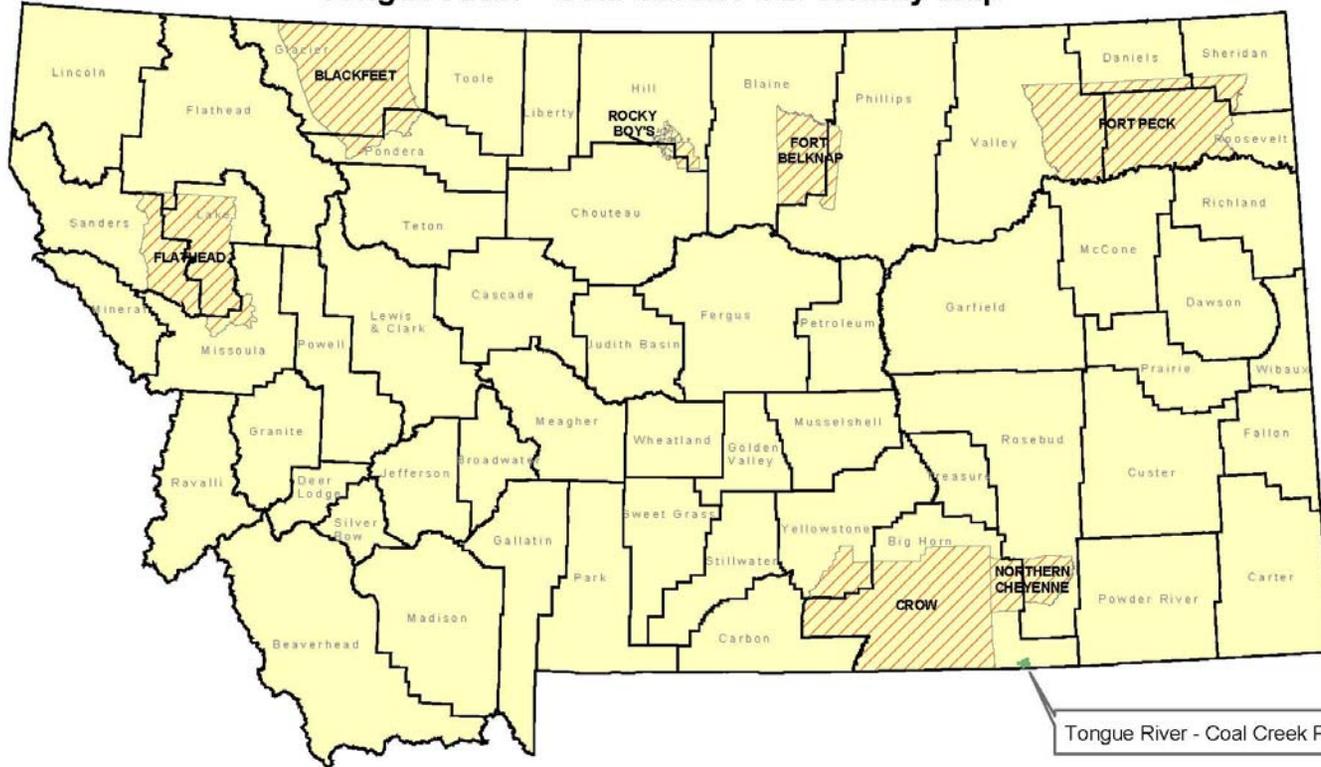
BLM must determine whether to:

- approve the proposed action,
- approve individual federal components of the proposed action (as presented in Table 2.5-1), or
- modify the proposed action with mitigation measures and monitoring activities that may be necessary for federal actions in addition to those measures proposed by the operator.

BLM will not make decisions on construction, well drilling, completion and production for any private and state wells, or their supporting infrastructure. The MDEQ, Department of Natural Resources and Conservation (DNRC) and MBOGC have jurisdiction over their individual components of this project. Their respective decisions have been incorporated into Section 1.2.1, Other Relevant Documents.

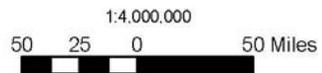
The project map (1.3-2) shows the project boundary, existing and proposed wells, access roads, pipelines (water and gas), power lines, and the existing central gathering/metering/water processing facilities in the POD area.

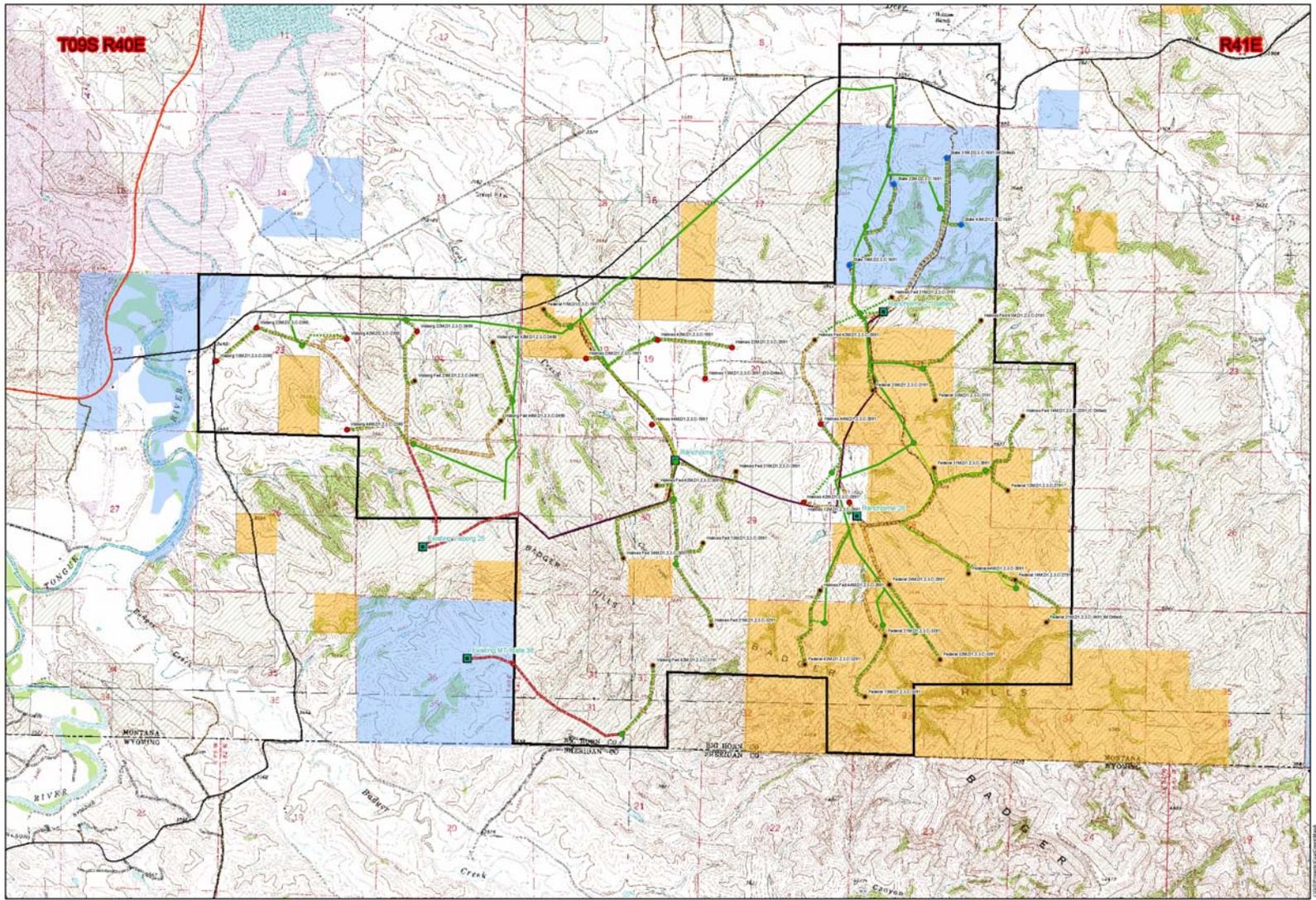
Tongue River - Coal Creek POD Vicinity Map



Legend

-  Native American Reservations
-  Tongue River - Coal Creek POD





Map A - Project Facility Map

- | | | | |
|----------------|-----------------------------|--------------------|-------------------|
| ● Federal Well | — Corridor with Bittercreek | — 2 Track Road | □ Coal Creek POD |
| ● State Well | — Corridor | — All Weather Road | ▨ Federal Mineral |
| ● Fee Well | — Overhead Power | — County Road | ■ Federal Surface |
| ● Power Drop | — Underground Power | — Highway | ■ State Surface |
| ■ Battery | — HV Underground Power | — 2003 Corridor | |

Coal Creek POD
December 9, 2004

0 0.375 0.75 1.5 Miles

1.4 ISSUE IDENTIFICATION

Relevant issues were identified by technical staff based on issues highlighted during the 2003 MT FEIS, the 2004 Badger Hills POD EA, the 2004 Powder River Gas POD EA and the 2004 Tongue River – Dry Creek POD EA; from landowner, agency and tribal consultation; and site inspections in the project area. Relevant issues include the following:

- Air quality effects from CBNG development activities including drill rig emissions (exhaust emissions as well as dust generated by drilling the wells) and fugitive dust (construction activities as well as road dust) and compliance with all applicable air quality rules and standards, including ambient air quality standards
- Cumulative Impacts of this action when considered with past, present and reasonably foreseeable future actions
- Effects to cultural resources
- Effects to soils from using reserve pits and other drilling and construction activities
- Development of new two-track roads
- Drawdown of groundwater table and effects to springs and wells (pumping water out of coal seams)
- Habitat fragmentation and disturbance effects to wildlife habitat
- Potential for Methane Migration
- Reclamation of disturbed areas associated with construction activities
- Surface Water Quality

1.5 FEDERAL, STATE AND LOCAL PERMITS OR REQUIRED CONSULTATION

Montana Air Quality Permits

This EA is being prepared in conjunction with the MDEQ, which has jurisdiction over sources of air pollution in the State of Montana. Therefore, the Air Resources Management

Bureau must be consulted to make permit determinations regarding the use of air contaminant sources that would be used as part of the proposed CBNG exploration and development (drill rigs, emergency flares, etc.), as well as installation of compressor engines/turbines.

Based on information provided by Fidelity, the drill rig proposed to be used to drill the wells would utilize a 400-horsepower (hp) diesel engine. The MDEQ completed an emission inventory using the information provided by Fidelity and emission factors obtained from the United States Environmental Protection Agency’s (EPA) Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I. The MDEQ determined that a MAQP is not required for the exploration portion of the Coal Creek Project because the emission potential of the entire project is well below the MAQP threshold of 25 tons per year, except for oxides of nitrogen (NO_x) emissions from the drill rig stationary engine. However, ARM 17.8.744(1)(i) exempts drill rigs that have the potential to emit less than 100 tons per year and that do not operate in the same location for more than 12 months from the need to obtain a MAQP. MDEQ’s permit determination is very conservative because drilling activities were calculated based on 8,760 hours per year and the entire exploration portion of the project will be completed within approximately 5 months. Technically, for an air quality permit determination, each hole would be considered a separate project; so, considering emissions from the entire project, as proposed to BLM, ensures that the analysis used to make the air quality permit determination for exploration is very conservative. The emission potential of the proposed exploration project is summarized in Table 1.5-1.

1.5-1 Emission Inventory - Air Quality Permit Determination - Exploration

<i>Emission Source</i>	Tons/Project						
	<i>TSP</i>	<i>PM₁₀</i>	<i>PM_{2.5}</i>	<i>NO_x</i>	<i>VOC</i>	<i>CO</i>	<i>SO_x</i>
Drill Rig(s) – (Engine Emissions)	0.00	0.00	3.86	54.31	4.33	11.70	3.59
Drill Rig(s) – (Drilling Emissions)	5.12	5.12	5.12	0.00	0.00	0.00	0.00
Well Testing – (Gas Flaring)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.12	5.12	8.98	54.31	4.33	11.70	3.59

Although MDEQ determined that a MAQP is not required for the proposed exploration project, MDEQ would need to be contacted to determine whether a MAQP would be required for any future development, such as installing compressor engines, turbines, or any other sources of air contaminants that are outside the scope of the proposed project or that do not already have a valid MAQP.

Several facilities that would be used to extract and transport the CBNG have already received MAQPs from MDEQ. Based on information provided by Fidelity, five previously permitted field compressor stations would be used to extract the gas. Two of the previously permitted field compressor stations are existing facilities and three of the previously permitted field compressor stations have not yet been constructed. The two existing field compressors that would be used for Fidelity's Coal Creek POD are the Bitter Creek Pipelines, LLC (BCPL) Visborg 25 Battery (MAQP #3302-00) and the BCPL Montana State 36 Battery (MAQP #3303-00). The three previously permitted field compressor stations that have not yet been constructed but would be used for Fidelity's Coal Creek POD are the BCPL Rancholme 21 Battery (MAQP #3334-00), BCPL Rancholme 29 Battery (MAQP #3335-00), and BCPL Rancholme 28 Battery (MAQP #3337-00). In addition, an existing sales battery, BCPL Symons Central Compressor Station (MAQP #3250-00), would also be used for Fidelity's Coal Creek POD. MDEQ previously determined that all of the field compressors and the sales battery require MAQPs and each facility has applied for and received a final MAQP. Emissions from the existing compressor sites will be analyzed for each alternative.

Montana Pollutant Discharge Elimination System Permit (MPDES permit)

The MDEQ has been granted primacy from the United States Environmental Protection Agency (EPA) for issuing waste water discharge permits for such discharges into state waters. Fidelity's existing MPDES discharge permit for discharge into the Tongue River (MT-0030457) would be used for this project. This permit allows for the discharge of up to 1,600 gallons per minute (gpm) of untreated CBNG water.

Federal 401 Certification

§401 of the Federal Clean Water Act (CWA) states that "Any applicant for a Federal license or

permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate... that any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of this Act...If the State... fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence." (CWA §401.a.1)

According to Montana's 401 Certification procedures (ARM 17.30, Sub-Chapter 1), an application is deemed complete if the department has not made a determination within 30 days after receipt of the application or, subsequent to receipt of the initial application, within 30 days of receipt of materials submitted by the applicant that supplement the application (ARM 17.30.103.6). These procedures also specify that "If the department does not notify the applicant of a tentative determination within 30 days after the application is deemed to be complete, the department is deemed to have waived certification." (ARM 17.30.106.1).

On March 17, 2004, Fidelity sent a letter to the MDEQ requesting §401 Certification for the Coal Creek POD. The MDEQ responded to this with a deficiency letter on April 16, 2004. Fidelity responded to these deficiencies on September 30, 2004. Since that time, the 30 day time period for completeness review expired on October 31, 2004, and the 30 day time period for the tentative determination expired on November 30, 2004, without such a determination being made. As such, by rule (ARM 17.30.106.1), the MDEQ is deemed to have waived §401 certification for this project. This is consistent with typical 401 waiver procedures of the MDEQ for projects which require a MPDES permit (Reid, personal communication, 11/30/04).

Storm Water Discharge Permit

The owner or operator of any activity, which disturbs greater than one acre of land and has the

potential to discharge storm water runoff to state waters, including ephemeral drainages or intermittent tributaries, must submit a Notice of Intent (NOI) under the “*General Permit for Storm water Discharges Associated with Construction Activity*” (“General Permit” – MT-R100000). The General Permit requires that the owner or operator develop a Storm Water Pollution Prevention Plan (SWPPP), including BMP’s, maintenance, self inspection and record keeping procedures in order to prevent significant sediment from entering state waters and causing a violation of any state water quality standard. The NOI is effective upon receipt by the MDEQ provided that the NOI package is complete. The MDEQ may deny coverage under the General Permit if the project does not comply with terms and conditions of the permit or based on the criteria of ARM 17.30.1341(4). The operator may terminate coverage under the General Permit after the site has achieved 70 percent of the pre-disturbance vegetative coverage. MDEQ provided confirmation to Fidelity Exploration & Production Company’s Notice(s) of Intent and issued storm water discharge permits MT-R101174, MT-R101240, MT-R101278, and MT-R101279. Fidelity requested a modification to Storm Water Permits MT-R101278 and MT-R101279, on December 2, 2004 and submitted Notice(s) of Intent for Rancholme 21, Rancholme 28 and Rancholme 29, on December 9, 2004. MDEQ has not provided confirmation to the modification requests nor the Notice(s) of Intent.

MBOGC Earthen Pit or Pond Permit

MBOGC approves permits for the construction and operation of reservoirs/pits designed to store water produced in association with the CBNG wells. The Coal Creek proposal has one existing off-channel impoundment (23-0299) and one previously approved impoundment (44-3490) to be used in the water management plan. Fidelity is currently discharging water produced by private CBNG wells to the existing impoundment site, as necessary to satisfy landowner stock watering needs. The previously approved impoundment, which included a BLM approved monitoring plan, was included in the Badger Hills POD EA analysis and decision. These impoundments are proposed to receive federally produced water from wells in the Coal Creek POD. The impoundments are entirely located on private land, private mineral lease. BLM approvals required these impoundments to be in accordance with Federal Onshore Oil and

Gas Order No. 7. Fidelity has an MBOGC approved Application For Permit To Construct Or Operate An Earthen Pit Or Pond, dated April 3, 2001 (23-0299) and December 15, 2003 (44-3490).

Surface Use Agreement

The operator must certify that an agreement with the private surface owners exists or, in lieu of an agreement, that the requirements of Federal Oil and Gas Onshore Order No. 1 have been met. Fidelity has provided certification of these agreements.

Water Well Agreement

MBOGC Order 99-99 requires CBNG operators to offer water mitigation agreements to owners of water wells or natural springs within one mile of a producing CBNG field or within the area that the operator reasonably believes may be impacted by a CBNG production operation. Fidelity has provided certification of these agreements.

SHPO Consultation

BLM’s approval of the APDs and associated infrastructure developments is considered a Federal Undertaking as defined in Section 106 of the National Historic Preservation Act and its implementing regulations found in 36 CFR 800. BLM’s Cultural Resource Program in Montana operates under a National Programmatic Agreement with an implementing protocol with the Montana SHPO. A provision in the protocol provides for case by case review for controversial projects. BLM has consulted with the Montana SHPO under this provision. Consultation was initiated in October, 2004. The BLM has compiled and reviewed all of the cultural resource inventory information pertaining to the project and provided the information to the SHPO in December, 2004. BLM has determined that the proposed Coal Creek POD would have no effect to historic properties. This determination was based on a lack of direct impacts to eligible historic properties. This information was communicated to the SHPO on December 20, 2004. The SHPO granted its concurrence via letter dated January 18, 2005.

Tribal Consultation

The Bureau of Land Management recognizes its responsibilities to consult with the Native Americans in accordance with Section 106 of the National Historic Preservation Act. To that end,

15 Tribal groups consisting of the Northern Cheyenne tribal historic preservation officer, the Crow Cultural Commission, Fort Peck Tribes, Lower Brule Sioux Tribe, Rosebud Sioux Tribe, Pine Ridge Sioux, Cheyenne River Sioux, Eastern Shoshone Tribe, Standing Rock Sioux, Northern Arapahoe Tribe, Blackfeet Tribe, Ft. Belknap Community Council, and the Chippewa-Cree Tribe of the Rocky Boy's Reservation, were sent a letter dated August 3, 2004, seeking Native American input on this project. The letter summarized the proposed undertaking and solicited tribal input on the proposed development.

Attempts were made to set up a field tour of the project area for these interested parties. Only the Northern Cheyenne Tribe expressed an interest in CBNG development and wished to be consulted further on this project. A field tour of the project area was conducted for a member of the Northern Cheyenne Tribe on December 20, 2004. However, no substantive comments were received.

As a result, the BLM's Miles City Field Office believes it has made a good faith effort to consult by providing ample opportunity for consultation with the Northern Cheyenne and other Tribal interests for consultation on this undertaking.

BLM proposes to proceed based on previous comments received for both the approved Badger Hills POD (2/9/2004) and the recently approved Dry Creek POD (12/16/04). Consultation on both of these adjacent PODs did not identify any areas of significance or concern to the Northern Cheyenne. Field tours of both areas revealed that neither area contained traditional cultural properties.

Previous consultations with the Northern Cheyenne recommended a tribal representative monitor certain surface disturbing construction activities resulting from POD developments in the vicinity of sites. As a result, a statement was incorporated into the Conditions of Approval (COA), identifying the need for the company to conduct monitoring. In the absence of specific comments on the Coal Creek POD project area, BLM assumes similar results would be found in the Coal Creek POD area. Consequently, BLM will apply the same Conditions of Approval as were applied to previous PODs. The BLM's Miles City Field Office has prepared Conditions of Approval that will become part of the Record

of Decision and will be part of approved APDs issued for the Coal Creek POD.

FWS Consultation

BLM initiated Section 7 Consultation under the Endangered Species Act (50 CFR 402.14) with the US Fish and Wildlife Service (FWS) on Fidelity's proposed POD. BLM developed a Biological Assessment of impacts to Threatened/Endangered (T/E) species based upon a "may affect, likely to adversely affect" determination for the bald eagle and the FWS returned a Biological Opinion and Concurrence addressing the BLM Biological Assessment (letter dated 11/26/03) with recommendations for protection/mitigation to T/E species, which have been incorporated into the proposed action alternative. The protection measure required is an ongoing monitoring program to determine activity status of the bald eagle nest and to assess if activity affects that status. Raptor protection for the overhead power lines has been included into the Proposed Action.

A "no effect" determination was made for interior least tern, gray wolf, grizzly bear, pallid sturgeon, Ute ladies' tresses, Montana arctic grayling, and warm spring zaitzavian beetle, and was concurred with by the USFWS. No further discussion of these species will occur in this EA. Additionally, a "not likely to adversely affect" determination was made and concurred with for the black-footed ferret. Since no construction activity will occur on the one small prairie dog town within the POD, there will be no further discussion of ferrets in this EA.